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Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT			
0005		UNDEFINED	Dollars, U.S.	UNDEFINED	\$100,809.00			
EXERCISED OPTION	Option Period Four (4) CPAF		C.S.					
	X076 ESC EV/33: PBEST Generation Evaluation at V FOB: Destination			iological Waste				
	PURCHASE REQUEST N	NUMBER: ACQR	1683152					
				MAX COST	\$91,682.00			
				BASE FEE	\$0.00			
		S	UBTOTAL M	IAX COST + BASE	\$91,682.00			
			ľ	MAX AWARD FEE	\$9,127.00			
			TOTAL	MAX COST + FEE	\$100,809.00			
ITEM NO	SUPPLIES/SERVICES	MAX	UNIT	UNIT PRICE	MAX AMOUNT			
000501	FUND ACRN AA CPAF	QUANTITY UNDEFINED		UNDEFINED	\$0.00			
	Funding Doc. No.: N69218	810RCT0150 CUS	STOMER AC	RN AA				
	FOB: Destination MILSTRIP: N6921810RCT0150							
				MAX COST	UNDEFINED			
				BASE FEE	UNDEFINED			
		IAX COST + BASE	\$0.00					
		MAX AWARD FEE	UNDEFINED					
		MAX COST + FEE	\$0.00					
	ACRN AA CIN: N6921810RCT01500	000000000000000000000000000000000000000			\$45,809.00			

Section C - Descriptions and Specifications

STATEMENT OF WORK

PERFORMANCE WORK STATEMENT

LOW LEVEL RADIOLOGICAL WASTE (Ra-226) GENERATION EVALUATION VARIOUS BRAC ACTIVITIES

SECTION 1 – GENERAL

1.1 INTRODUCTION

This Scope of Work (SOW) provides for an evaluation of practices at Base Realignment and Closure (BRAC) cleanup sites with regard to generation and disposal of soil/debris containing radium-226 and classified as low level radiological waste (LLRW), soil/ debris containing both radium-226 and strontium-90 and classified as LLRW. This SOW will be managed by Naval Facilities Engineering Command, Engineering Service Center, Port Hueneme, California with input from BRAC Program Management Office West and the Navy's Radiological Affairs Service Office (RASO).

1.2 BACKGROUND

The Navy is performing cleanup actions at a variety of BRAC bases that result in the generation and disposal of LLRW. This SOW addresses LLRW related to the former use of radium-226 in radioluminescent devices. Dials, gauges, markers and signage are examples of such devices. Many of these devices used radium-226 as a component in radioluminescent paint. Radium paint shops were historically operated at Navy shipyards and air stations to repair and refurbish these devices. Based on the results of BRAC base cleanups, radium-226 is the primary radiological contaminant. Radium-226 is a gamma emitter and can be detected in the field using a sodium iodide detector (NaI detector). The Navy also collects samples for analysis at a fixed-base laboratory. The accepted cleanup level for radium-226 is 1 picoCurie per gram plus background. Background estimations are site specific. Soil or debris that exceeds the cleanup goal for radium-226 is considered LLRW.

In addition to radium-226, other radiological sources may have been used at BRAC bases, and these are discussed in Historical Radiological Assessments prepared for each BRAC base. Although other radionuclides may be present at BRAC bases, this SOW considers only radium-226.

1.3 OBJECTIVES

This objectives of this SOW are to:

- Evaluate current practices at BRAC bases for identifying LLRW for disposal (Hunters Point Shipyard, Treasure Island, and Alameda Point);
- Provide recommendations to refine existing practices for identifying LLRW that are sufficiently
 conservative to ensure LLRW is identified and properly disposed, but not so conservative that excessive
 non-LLRW is disposed of as LLRW;
- Perform a cost analysis by documenting the historical costs for characterization and disposal of LLRW, and estimate potential savings based on recommendations provided in this evaluation;
- Document the requirements for disposal of non-LLRW investigation derived waste generated from a radiologically-impacted site;
- Prepare a report that documents the evaluation and summarizes conclusions and recommendations.

The period of performance for this contract will be for 9 months.

SECTION 2 – WORK ELEMENTS

2.1 Work Element 1 – Project Management

The Contractor shall provide personnel and resources for the management and control of project activities, such as scoping, planning, estimating, executing, tracking, reporting, and closure of the project. This element includes direct management of the project, as well as the support for administrative functions needed for successful project management. This element also includes meetings with Navy personnel to discuss interim project results during the project's execution.

2.2 Work Element 2 – Data Review

The Contractor shall provide the following:

- Collection and compilation of laboratory and field screening data from Hunters Point Shipyard, Treasure Island, and Alameda Point;
- Review of background calculation methodologies;
- Compilation and review of current field practices used to identify and segregate LLRW from non-LLRW;
- Evaluation of the threshold levels being used for field instruments (NaI detector) to segregate LLRW from non-LLRW, including the methods used to estimate background;
- Reviewing field data and the corresponding laboratory analytical data used for identification and disposal of LLRW.

The cleanup goal for radium-226 as well as the screening level utilized in the field depend on the calculation of background activity. The generally accepted cleanup goal is 1 picoCurie per gram (pCi/g) above background. Screening levels utilized in the field are more variable, but the most common screening level is background plus 3 standard deviations, which is measured in counts per minute (cpm). Background measurements are collected in a nearby, non-impacted area. Although this SOW does not focus on the method that background activity is calculated, the Contractor shall address its method of calculation and how variations in background affect the classification of LLRW.

Current field practices should be documented and understood. These field practices should be used as a baseline for comparison with other potential practices that would reduce the disposal of non-LLRW at LLRW facilities while ensuring the segregation and disposal of LLRW. Factors to consider include the threshold level used to identify a radiological hot spot(s), and once identified, how much soil is segregated as LLRW.

Soil and other debris may be identified in the field for disposal as LLRW using field screening devices known as scintillation detectors or sodium iodide detectors. Screening results above mean background plus 3 standard deviations (referred to as background plus 3 sigma), result in the segregation of material for disposal as LLRW. This field screening level ensures that LLRW (material that exceeds the cleanup goal of background plus 1 pCi/g) is identified and properly disposed, and not mistakenly classified as non-LLRW. The screening level is meant to provide assurance that the cleanup goal is not exceeded, and material that should be classified as LLRW is classified correctly. The Contractor should review historical data to evaluate whether or not a less conservative screening level could be used that provides assurance that LLRW is classified correctly, while reducing the volume of non-LLRW that is classified as LLRW. If a different screening level is recommended, the Contractor shall address the potential for regulatory agency acceptance given their participation in the planning process and concurrence on past planning documents.

2.3 Work Element 3 – Cost Analysis

The Contractor shall prepare a cost analysis to document current LLRW classification and disposal costs and potential savings based on the implementation of refined LLRW segregation practices and/or use of refined screening levels.

2.4 Work Element 4 – Reporting

The Contractor shall prepare a draft and final report documenting the analyses completed and summarizing the findings and recommendations. A draft report will be issued for Navy review. Review comments will be provided within 21 days. The Contractor will then incorporate review comments and issue a final report.

SECTION 3 – PERFORMANCE REQUIREMENTS

Performance Objective	Performance Standard	Acceptable Quality Level	Assessment Method	Incentive	Remedy
Develop					
Draft Report (technical content)	Document includes technical alternatives or procedures containing the following qualities: • reduced cleanup cost • reduced cleanup time • acceptable cleanup goals by stakeholders • improved strategy	Conclusions and recommendations described completely and supported with sound technical reasoning. Recommendations are for an improved approach to LLRW characterization as measured in cost avoidance or other tangible or intangible benefits. Improved strategy is technically achievable without additional cost.	COR and Navy PM will review the data	Meeting or exceeding AQL will result in a 10% award fee rating.	Not meeting AQL during a preliminary review will require specific rework to meet Government goals and objectives. Conduct review meeting to determine concurrence of Navy goals and objectives.
Draft Report (presentation quality)	Document is organized, well written and can be comprehended by the general community. Document reviewed by an editor and includes persuasive discussions. Document includes • background summary • data analysis • conclusions • recommendation s	Factually accurate and complete with no more than 2 major deficiencies (e.g. missing information) and 5 minor deficiencies (e.g. spelling, format, wrong date).	COR and Navy PM will review the data	Exceed AQL will allow Contractor to skip Draft Final report and produce Final Report	Not meeting AQL will require Contractor to produce a Draft Final report and submitting for Government review before proceeding to Final Report.

SECTION 4 - DELIVERABLES

- Approach for data review and evaluation
- List of questions and/or additional data needed from the Navy BRAC Coordinator

- Meeting minutes
- Draft, Draft Final, and Final Report

SECTION 5 – SPECIAL CONDITIONS:

- 5.1 All requirements of the Contract in addition to those specifically mentioned in this delivery order remain in full effect and performance under this delivery shall be in accordance therewith.
- 5.2 Minutes of team meetings shall be submitted to the Navy project manager within **10** calendar days after each meeting.
- 5.3 The Contractor shall ensure that any potentially sensitive data is dealt with in accordance of Navy policy. This should include provisions for handling trade secrets and classified information if applicable.
- 5.4 The Contractor will obtain approval from the Contracting Officer before obtaining photography records, still or motion picture and/or aerial or ground photographs, in accordance with Public Law: 18 U.S. Code 795 and applicable State Regulations. The Government may provide a representative to act in an advisory capacity to prevent unauthorized disclosure of classified information.
- 5.5 The Contractor shall not disclose any data resulting from actions in this Contract to the news media or public. The Contractor shall refer all press or public contacts to the CSO and shall notify the RPM of their actions. The Contractor may not distribute reports or data to any other source, unless specifically authorized by the Public Affairs Officer in accordance with NAVFAC Instruction 5720.1A.

SECTION 6 - CONTRACT ADMINISTRATION DATA

6.1 General Information

Location: Various BRAC Bases

California

Type of funds: BRAC

6.2 Points of Contact:

Project Manager

Name: Amy Hawkins

Mailing Address: Naval Facilities Engineering Command

Engineering Service Center, EV 411

1100 23rd Avenue

Port Hueneme, CA 93043

Phone: (805) 982-4890 FAX: (805) 982-4304

BRAC Coordinator

Name: George Patrick Brooks

Mailing Address: BRAC Project Management Office

1455 Frazee Road, Suite 900

San Diego, CA 92108

Phone: (619) 532-0953 FAX: (619) 532-0940

RASO Coordinator

Name: Laurie L. Lowman Mailing Address: NAVSEADET RASO P.O. Drawer 260, Building 1971 NWS Yorktown, VA 23691-0260

Phone: (757) 887-7650 FAX: (757) 887-3235

Contracting Officer:

Name: Elizabeth Corder, SCAN

Phone: (805) 982-4012

Email: Elizabeth.corder@navy.mil

Contracting Officer's Representative (COR):

Name: Leah Alejo, NAVFAC ESC

Phone: (805) 982-1753
Email: <u>leah.alejo@navy.mil</u>

Alternate Contracting Officer's Representative (ACOR):

Name: Palmer Anderson, NAVFAC ESC

Phone: (805) 982-1488

Email: Palmer.Anderson@navy.mil

SECTION 7 - PERIOD OF PERFORMANCE

7.1 The work shall begin upon contract award and shall be completed within 9 months. An additional month will be allowed for project closeout.

SECTION 8 – REFERENCES

- 8.1 Basewide Radiological Removal Action Memorandum, Hunters Point Shipyard, San Francisco, California, Revision 2006.
- 8.2 Base-Wide Radiological Work Plan Revision 1, Hunters Point Shipyard, San Francisco, California, October, 2007.
- 8.3 Final Project Work Plan, Revision 2, Base-wide Storm Drain and Sanitary Sewer Removal, Hunters Point Shipyard, San Francisco, California, June 2008.
- 8.4 Final Project Work Plan, IR Sites 5 and 10 (Buildings 5 and 400) Storm Drain and Sewer Drain Lines TCRA, Alameda Point, Alameda, California, June 13, 2008.
- 8.5 Final Time-Critical Removal Action Work Plan, Installation Restoration Sites 1, 2, and 32, Former Naval Air Station Alameda, Alameda Point, Alameda, California, March 2, 2007.
- 8.6 Final Removal Action Work Plan/Remedial Design, Non-time Critical Removal Action, IR Site 12, Treasure Island, San Francisco, California, February 26, 2007

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0005	Destination	Government	Destination	Government
000501	N/A	N/A	N/A	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0005	POP 29-SEP-2010 TO 31-JUL-2011	N/A	N/A FOB: Destination	
000501	N/A	N/A	N/A	N/A

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 97X4930 NH5A 000 77777 0 068894 2D 000000 COST CODE: 00010RCT0150 AMOUNT: \$45,809.00 CIN N6921810RCT01500000000000000000: \$45,809.00

Section I - Contract Clauses

SECTION I

Section I. DESCRIPTION

The estimated cost-plus-award fee amount is based upon the Contractor's cost proposal No. OP61665 of 16 September 2010, and the proposal is considered to present an acceptable technical approach. All work and services shall be accomplished in accordance with the Performance Work Statement and the Contractor's referenced proposal.

Section II. SERVICE CONTRACT ACT/DAVIS-BACON ACT

This task order is not subject to the Service Contract Act or the Davis-Bacon Act.

Section III. INVOICING

The Contractor shall prepare a Public Voucher, Standard Form 1034/1035 in accordance with the contract clause 5252.232-9001 "Submission of Invoices" (Cost Reimbursement, Time-and-Materials, Labor-Hours, or Fixed Priced Incentive)(July 1992).

Section IV. MODIFICATION REQUIRED UNDER LIMITATION OF COST CLAUSE

FAR 52.232-20 LIMITATION OF COST, as incorporated by reference in Section I of the basic contract, applies to this order.

Section V. PERIOD OF PERFORMANCE

The period of performance for this task order will be from date of award to 31 July 2011.

Section VI. TRAVEL

Travel will be in accordance with the basic contract, clause H11, and with the Federal Travel Regulations, Joint Travel Regulations and Standardize Regulations, as set forth in FAR 31-205-46(a)(2)

Section VII. TERMS AND CONDITIONS

All task orders are subject to the terms and conditions of the contract. In the event of conflict between the contract and this order, the contract shall control.

Section VIII. INCREMENTAL FUNDING

Reimbursement of allowable costs shall not exceed the aggregate amounts below, and the Contractor will not be reimbursed by the Government for allowable costs incurred hereunder in excess of such amounts. As of the date of this order, there has been allotted the sum of \$45,809.00. The allotted funding will cover approximately 45% of the requirements of this task order. The balance to fully fund this order is \$55,000.00.

	<u>Award</u>	<u>Funded</u>	Balance to Fund
Estimated Cost	\$ 91,682.00	\$ 41,662.00	\$ 50,020.00
Award Fee	<u>\$ 9,127.00</u>	\$ 4,147.00	\$ 4,980.00
TOTAL	\$ 100,809.00	\$ 45,809.00	\$ 55,000.00